

SAFETY & LOSS PREVENTION OUTLOOK

GETTING THE BALANCE RIGHT

Using chemicals
safely means knowing
how they work and
understanding the risks



ALSO INSIDE:

National Poison
Prevention
Week

Florida's Severe
Weather
Awareness Week

OSHA's Top 10
and how to avoid
them

Spotlight on
insurance fraud
investigations



OUTLOOK

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A Message from the Editor

"There is nothing permanent except change." -- Heraclitus

Welcome to the NEW YEAR and a NEW OUTLOOK -- that is, a newly-designed Safety & Loss Prevention OUTLOOK! The new year has already ushered in many changes, and with changes come challenges. Let's remember that those challenges can give us new opportunities to make progress -- in our work, in our personal lives, in our communities, and in the world at large.

Leri Taylor

Here are some more inspiring quotes to set us on the right track:

"What is the difference between an obstacle and an opportunity? Our attitude toward it. Every opportunity has a difficulty, and every difficulty has an opportunity." -- J. Sidlow Baxter

"A clay pot sitting in the sun will always be a clay pot. It has to go through the white heat of the furnace to become porcelain." -- Mildred Struven

"Not everything that is faced can be changed, but nothing can be changed until it is faced." -- James Baldwin

"Victory comes from finding opportunities in problems. And opportunities multiply as they are seized." -- Sun Tzu

"A setback has often cleared the way for more prosperity. Many things have fallen only to rise to more exalted heights." -- Seneca

"All great changes are preceded by chaos." -- Deepak Chopra

"Innovation is the ability to see change as an opportunity, not a threat." -- Steve Jobs

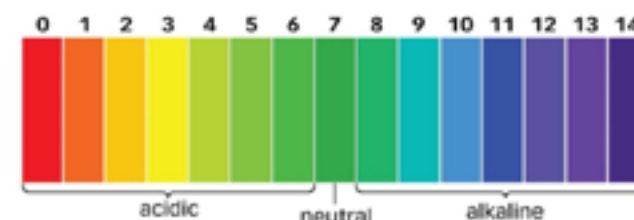
"Don't judge each day by the harvest you reap but by the seeds you plant." -- Robert Louis Stevenson

"The future depends on what you do today." -- Mahatma Gandhi

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CHEMICAL REACTIONS

THE SCIENCE OF HANDLING
CLEANING SUPPLIES &
OTHER CHEMICALS
SAFELY &
EFFECTIVELY

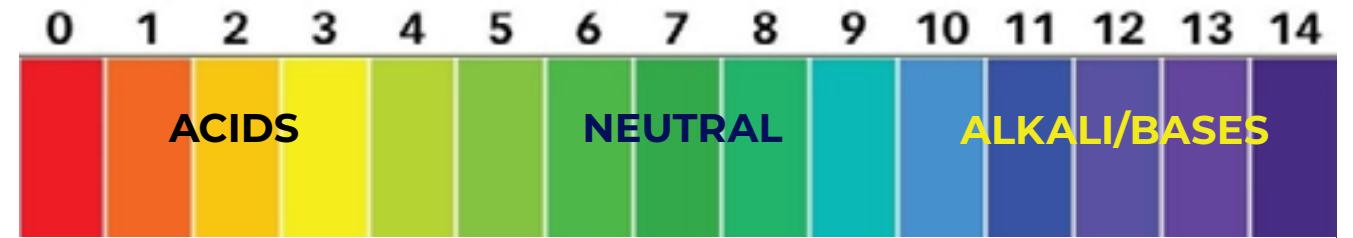
We all want clean work and living spaces, but the chemicals used to clean can be more harmful than the dirt and germs they are fighting, especially if they aren't being used properly.

THE CHEMISTRY

Cleaning products are chemical compounds used to break down and remove contaminants from surfaces. They contain a combination of:

- Surfactants -- literally "surface + active + agents" -- allow cleaning agents to mix with water in order to penetrate, lift, trap, and rinse away contaminants
- Corrosives -- highly reactive substances that eat away many common materials by chemical reaction
- Abrasives -- use physical friction to break down contaminants on surfaces
- Essential Oils -- extracted from plants and added to cleaning products to help break down contaminants, kill certain microbes, and eliminate odors
- Disinfectants -- used to kill infectious microbes such as viruses and bacteria

All cleaning products fall somewhere along the pH scale, from 0 to 14, with 7 being "neutral." Substances with a pH below 7 are more acidic, while those with a pH above 7 are more alkaline (also called basic). Cleaning, in the simplest terms, is an attempt to "neutralize" the ions in substances -- that is, to bring their pH closer to 7.



pH 0-1 sulfuric (battery) acid	pH 5-6 rainwater hydrogen peroxide black coffee, bananas healthy skin & hair shampoo & conditioner indigestion/gas medications	pH 9-10 baking soda laundry detergent dishwasher detergent borax powder hand soap carpet cleaner antacid medications
pH 1-2 gastric (stomach) acid hydrochloric acid phosphoric acid	pH 6-7 urine, saliva milk, sugar, flour	pH 10-11 washing soda glass cleaner w/ammonia
pH 2-3 lemon juice, vinegar toilet bowl cleaners tub & tile cleaners calcium/lime/rust removers	pH 7 distilled water (neutral)	pH 11-12 ammonia household cleaners w/ ammonia or bleach
pH 3-4 citric acid (apples, oranges) carbonated sodas, wine skin soaps & cosmetics household cleaners w/ vinegar	pH 7-8 blood, hand sanitizer petroleum jelly Isopropyl alcohol mild dish soap (e.g. Palmolive)	pH 12-13 oven cleaner household bleach
pH 4-5 beer, honey tomatoes (ketchup, tomato sauce) dishwasher rinse aid	pH 8-9 eggs, seawater toothpaste stone cleaner hardwood cleaner heavy-duty dish soap (e.g. Dawn)	pH 13-14 sodium hydroxide (lye) liquid drain cleaner

ACTIVE INGREDIENTS OF COMMON CLEANING PRODUCTS

HYDROCHLORIC / PHOSPHORIC / SULFURIC ACID	VINEGAR, CITRIC ACID	HYDROGEN PEROXIDE	ISOPROPYL ALCOHOL	BAKING SODA, BORAX	AMMONIA	BLEACH
highly acidic (pH 0-2)	acidic (pH 2-4)	mildly acidic (pH 4-6)	near neutral (pH 6-8)	mildly alkaline (pH 8-11)	alkaline (pH 11-12)	highly alkaline (pH 11-13)
Lysol Heavy Duty Toilet Bowl Cleaner, CLR, Lime-A-Way, Zep Sulfuric Acid Drain Cleaner	Mrs. Meyer's Clean Day Multi-Surface Concentrate, Windex Vinegar Glass Cleaner	hand sanitizers, Lysol Hydrogen Peroxide Cleaner, Bona Hard Surface Floor Cleaner	hand sanitizers, OdoBan Disinfectant & Odor Eliminator	20 Mule Team Borax Detergent Booster, Bon Ami Powder Cleanser	Windex Original Glass Cleaner, Lysol All-Purpose Cleaner, Bona Wood Floor Cleaner	Clorox Toilet Bowl Cleaner with Bleach, OxiClean, Tilex Mold & Mildew Remover, Drano

DANGEROUS EQUATIONS

WHAT HAPPENS WHEN THESE CHEMICALS ARE COMBINED?

CHEMICAL #1	+	CHEMICAL #2	=	RESULTING COMPOUND	SYMPTOMS OF EXPOSURE / OUTCOME
HYDROCHLORIC ACID PHOSPHORIC ACID SULFURIC ACID	+	BLEACH	=	CHLORINE GAS	coughing, nausea, shortness of breath, chest pain, skin & mucus membrane irritation, long-term damage to lungs, eyes, & internal organs; death
VINEGAR, CITRIC ACID	+	BLEACH	=	CHLORINE GAS, OXYGEN, HEAT	see chlorine gas symptoms above; oxygen & heat emitted cause risk of fire or explosion
HYDROGEN PEROXIDE	+	LIGHT	=	OXYGEN, HEAT	oxygen & heat emitted cause risk of fire or explosion -- always store in an opaque container away from light
	+	VINEGAR	=	PERACETIC ACID	irritation/damage to eyes, skin, mucus membranes, throat, lungs
ISOPROPYL (RUBBING) ALCOHOL	+	BLEACH	=	CHLOROFORM	coughing, shortness of breath, skin & eye irritation, sedation, damage to nervous system & internal organs, respiratory or cardiac distress
BAKING SODA	+	VINEGAR	=	SODIUM ACETATE, CARBONIC ACID WATER, CO ₂	acid & base neutralize each other; creates a foamy reaction (CO ₂) leaving mostly water & salt, rendering it ineffective for cleaning; minor risk of eye irritation
AMMONIA	+	BLEACH	=	CHLORAMINE GAS	coughing, nausea, shortness of breath, chest pain, irritation/damage to mucus membranes, lungs, & eyes

Cleaning products can be dangerous on their own, especially those with a very high or very low pH; their corrosive nature makes them highly effective for cleaning but can also burn skin and damage surfaces. Some cleaning agents release harmful fumes that can irritate respiratory systems if proper precautions are not taken. Read and follow the instructions on the label -- many cleaning products require protective equipment like gloves and need to be used in a well-ventilated area.

While it may be tempting to mixing cleaning products together, doing so can result in dangerous chemical reactions, creating toxic gases or even explosions -- and it doesn't even create a more effective cleaner. Trust that cleaning products are formulated to work well enough on their own, as long as they are used as directed.

HOW TO CHOOSE A CLEANING PRODUCT

STEP 1: Identify the type of surface being cleaned (wood, tile, metal, porcelain, fabric, etc.).

- ACIDS (pH 0-6) can be used on concrete, brick, porcelain, and metal (brass, aluminum, steel, zinc, chrome, etc.). They can damage wood, stone, vinyl, plastic, and fabrics. Strong acids can damage glass.
- MILD BASES (pH 7-11) can be used on vinyl, sealed ceramic tile, most appliances, stainless steel, glass, natural stone (granite, marble, limestone), and fabrics. They can damage metal, stone, unsealed tile, and grout.
- STRONG BASES (pH 11-14) can be used on fabrics and glass; they can be used to clean other surfaces, such as porcelain and ceramic tile, but must be rinsed off in order to avoid damaging them.
- NEUTRAL cleaners (pH near 7) are safe for most surfaces and should be used on sensitive or porous materials such as laminate, wood, crystal, gold, silver, ceramic tile & grout, and natural stone.

STEP 2: Determine the pH of the contaminants being removed.

- ORGANICS such as food residue, fats & oils, soap scum, bodily fluids (urine, blood, etc.), and mildew are generally acidic and most effectively cleaned using NEUTRAL to ALKALINE cleaners.
- INFECTIOUS AGENTS such as bacteria, viruses, fungi, and other microbes can be disinfected with both acids and bases; choosing the right one depends upon the type of infectious agent and the surface being disinfected.
- INORGANICS like soil, clay, mineral deposits, hard water, and rust are generally alkaline -- these are best addressed using ACIDIC to NEUTRAL cleaners.
- When there is a combination of both, choose a cleaner with the safest pH for the surface.

STEP 3: Choose the best product for the job by reading the label or safety data sheets (SDS).

Before using any product, **ALWAYS READ THE LABEL** for instructions on safe use and precautions.

- Know the product's active ingredients and intended purpose.
- Follow the directions for use: Is the product used full-strength or does it need to be diluted? What type of secondary container & supplies should be used (bucket, spray bottle, sponge, etc.)? How long should the product be left on the surface? Does it need to be rinsed?
- Understand the risks and follow safe handling procedures: What are the health risks involved? What type of personal protective equipment is required (gloves, eye protection, mask, etc.)? Is ventilation necessary? What are the first aid procedures if something goes wrong?

BEST PRACTICE: Choose the mildest cleaner available that will still be effective; use products specifically formulated for certain tasks (e.g., do not use toilet bowl cleaner to clean anything other than toilet bowls; use only dishwasher detergent in dishwashers; clean stainless steel and natural stone with cleaners meant for those surfaces), and NEVER MIX CLEANERS with anything but water.

CHEMICALS AT WORK

COMMUNICATING HAZARDS & SAFE HANDLING PROCEDURES WITH EMPLOYEES

Whether in healthcare, laboratory, environmental, or maintenance and custodial settings, anyone who works with chemicals as part of their job needs to be given the knowledge and tools to do so safely.

SAFETY DATA SHEETS & LABELING

A Safety Data Sheet (SDS) communicates comprehensive safety information regarding individual hazardous chemicals, including: physical and environmental hazards; safe handling, transport, and storage procedures; protective measures to be followed (including use of personal protective equipment), and first aid in the event of exposure.

OSHA's Hazard Communication Standard (HCS or "HazCom") requires chemical manufacturers to provide SDSs so that employers can provide this information to all employees who use those chemicals. Agencies and universities may choose to designate a specific person in the organization to obtain and maintain SDSs, and to communicate any new SDS information to staff.

HAZARDOUS COMMUNICATION STANDARDS FOR EMPLOYERS

1. Maintain a master list of hazardous chemicals on site.
2. Create a written hazard communication program.
3. Make sure hazardous chemicals are properly labeled.
4. Make SDSs readily accessible to employees.
5. Provide comprehensive training to employees who use hazardous chemicals.

Any employee who works with chemicals should consult the SDS prior to the use of any hazardous chemical. Employers should ensure they are given instruction on proper use (including the use of PPE), minimizing risks, and responding to spills or accidents (such as chemical reactions) quickly.

Household cleaners that have ingredients and

safety information on the label do not require SDSs when used in the workplace; however, SDSs are required if the chemical is being used for custodial purposes, as this exceeds normal consumer exposure. Additionally, custodial workers need to be trained in proper use, including the use of secondary containers and the risks of mixing different cleaning chemicals (see pg. 4).

SECONDARY CONTAINERS

Any chemicals used in the workplace must be placed in containers designed for their use and be clearly labeled with contents and safety information.

OSHA requires containers to be labeled with the identity of the chemical and appropriate hazard warnings, INCLUDING secondary containers in many circumstances -- see #5 on the list on this page.

A secondary container is any container into which a chemical has been transferred from its original container. They are often used to dilute concentrated chemicals with water or to make the chemical more convenient to use (e.g., mop buckets, sprayers, squirt bottles, etc.).

Secondary containers can also be used to segregate chemicals from other incompatible chemicals within the same storage area (e.g., acids and bases), or to provide an extra layer of protection to minimize the risk of exposure if the primary container leaks or becomes damaged.

When choosing secondary containers, it is imperative to know which type of materials are safe to use with different chemicals -- they must be compatible and should not be susceptible to corrosion

LABELING REQUIREMENTS OF CHEMICALS FOR EMPLOYERS

1. The identity of the chemical and appropriate hazard warnings must be shown.
2. The hazard warning must be legible, permanently displayed, written in English, and must provide users with an immediate understanding of the primary health and/or physical hazard(s) of the chemical through the use of pictures and/or symbols.
3. The name and address of the manufacturer, importer, or other responsible party must be included.
4. Existing supplier labels must not be removed, altered, or defaced. If it must be replaced, the new label must contain the same information as the original and use ink that is not soluble in the liquid content of the container.
5. Portable secondary containers must comply with the labeling requirements listed above if any of the following events occur:
 - a. the material is not used within the work shift of the individual who makes the transfer;
 - b. the worker who made the transfer leaves the work area;
 - c. the container is moved to another work area and is no longer in the possession of the worker who filled the container.

Labels on secondary containers are not required if the worker who made the transfer uses all of the contents during the work shift.

or degradation. For most chemicals, high-density polyethylene plastic bottles are preferred. Highly corrosive or reactive substances should be placed in stainless steel containers. Glass containers can be used for sensitive chemicals that can easily react with other materials, but can be fragile. Consider temperature and light exposure factors, as well as the potential for spills. Information regarding

appropriate secondary containers should be listed on the product's SDS.

NEVER use food or beverage containers as secondary containers -- not even for one-time or personal use. Empty water bottles, soda cans, or other food and drink containers are not made to contain chemicals, and doing so could lead to accidental ingestion or improper use.

Chemicals stored in the workplace must be organized and segregated according to their chemical classes and compatibility.

When storing chemicals, sort them and segregate by chemical hazard class so they cannot accidentally come into contact with each other. Consider the flammability, reactivity, corrosivity, and toxicity of the chemicals, as well as additional physical security measures (such as a locked cabinet or restricted room) for highly hazardous materials, controlled substances, and materials of extreme monetary or scientific value.

For more details regarding chemical segregation and storage procedures, see the National Institutes of Health (NIH) guidelines here: <https://ors.od.nih.gov/>

CHEMICAL SEGREGATION & STORAGE GUIDELINES

1. Consult the chemical's SDS for recommended storage procedures.
2. Store chemicals in compatible storage groups by separating chemicals by family (ORGANIC or INORGANIC), chemical class (ACIDS, BASES, OXIDIZERS, WATER-REACTIVES, EXPLOSIVES), and compatibility (FLAMMABLE, REACTIVE, CORROSIVE, TOXIC).
3. Store chemicals in appropriate containers and at appropriate temperatures, and label everything -- even water.
4. Never store chemicals directly on the floor or above shoulder height.
5. NEVER store chemicals in a domestic refrigerator or walk-in cooler where they could be mistaken for a food or beverage or cause a buildup of deadly vapors.
6. Consider PHYSICAL SECURITY measures to prevent access by unauthorized personnel.
7. Create a CHEMICAL HYGIENE PLAN for your workplace -- train staff in safe handling techniques, encourage tidy work practices, have a procedure in place for spills or other accidents, and ensure that all chemical containers are closed when not in use.
8. Purchase and store the smallest quantities needed, and inventory chemicals at least once a year.

CHEMICAL DISPOSAL GUIDELINES

Chemicals considered hazardous waste, as defined by the Environmental Protection Agency (EPA), include any waste that can pose a significant risk to human health or the environment if not properly managed. This includes certain types of paint, herbicides & pesticides, solvents, medications, and any chemicals that are flammable, corrosive, reactive, infectious, or toxic. Consult the chemical's SDS for disposal guidelines.

Chemicals not considered hazardous waste per the EPA can be thrown into the regular trash if they are:

- NOT radioactive, flammable, corrosive, or reactive
- NOT a biological or environmental hazard (carcinogens, toxins, & other infectious agents)

Small amounts of non-hazardous chemicals can be disposed of down the drain if:

- they meet the criteria for trash disposal
- they have a pH between 5.5 and 10.5
- they are disposed of individually and NOT along with other chemicals

Chemical Safety 101

What should a beginner know about chemical safety on Day 1 of a new job?



September 24, 2023 | Anna Coniglione | Training Content Developer | Lion Technology, Inc., Sparta NJ

New workers face substantially greater risk of on-the-job injury and illness than other employees. The Bureau of Labor Statistics reports that, in 2020, 114,000 workers missed time because of an injury or illness within 90 days of their first day on the job. At the same time, chemical management poses ongoing challenges for organizations of all sizes; OSHA's standard on hazard communication (1910.1200) ranks near the top of the agency's annual list of most frequently cited standards.

Given new hires' vulnerability to injury and illness, how can safety leaders start new employees on solid footing regarding hazardous chemicals? Here's how organizations can shape their safety culture to protect new employees and prevent chemical releases, exposures and other incidents -- starting on Day 1.

Life safety scenarios

Your first priority for chemical safety should be life safety scenarios, including contingency planning, evacuation routes and communication during emergencies.

This kind of emergency planning is important in every workplace. When hazardous chemicals are present, it's crucial. They can turn a bad situation worse -- sometimes much worse, and before you can react.

Experience, attitude and emotion

Attitude and emotion play important roles in chemical safety, too.

Some new hires will come with zero knowledge about chemical hazards, labeling or vocabulary. Others show up with some level of awareness or previous training -- but may be unfamiliar with the chemicals at your site.

Even experienced new hires may feel uncertain during their first days. New employees often feel pressure to prove themselves immediately and may hesitate to ask questions or admit knowledge gaps.

One goal for Day 1 is to immediately establish safety as a core company value. This can help lower any employee anxiety and stress, as well as remind them that the prime objective is to return home safe.

Hazcom and lab safety

OSHA maintains two standards related directly to chemical safety. Both require training for new employees upon initial assignment to the work area.

The agency's hazcom standard requires employers to provide workers with information and training about hazardous chemicals in the work area.

In part, employees must be trained to recognize and read hazard labels and Safety Data Sheets on chemical containers they handle or use.

OSHA's standard on controlling chemical exposure in laboratory settings (1910.1450) highlights the importance of hazard recognition and employee training as well. It also lays out requirements for a "chemical hygiene plan" detailing procedures, equipment and more to protect workers.

Knowing which of OSHA's chemical-focused worker protections apply, and having a plan to provide required training, is crucial to compliance.

In addition, there are standards on hazardous chemicals in Subpart Z of Part 1910, OSHA's regulations on personal protective equipment, emergency response, process safety and more.

If you've identified relevant training requirements as well as addressed the basics of hazard labels and SDSs -- and employees feel protected by your culture on Day 1 -- you're off to a strong start.

Editor's note: This article represents the independent views of the author and should not be considered a National Safety Council endorsement.

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NATIONAL POISON PREVENTION WEEK

MARCH 16-22, 2025

FEBRUARY 3-7, 2025

FLORIDA SEVERE WEATHER AWARENESS WEEK

Over two million poisonings are reported in the U.S. each year, with an average of two deaths per day.

Most incidents involve chemicals commonly found in homes and workplaces, like cleaning supplies, toiletries, and medications.

Pain medications -- more specifically acetaminophen (known by the brand name Tylenol) -- lead the list of substances implicated in adult poison exposures -- they are also responsible for the highest number of deaths.

Over 75% of all poison exposures and 62% of adult exposures reported to poison centers in the U.S. are unintentional -- and therefore preventable.

2023 -- ADULT POISON EXPOSURES

CATEGORY	EXAMPLES	# OF CASES	%
ANALGESICS/OPIOIDS	acetaminophen, ibuprofen, oxycodone	134,924	10.9
CARDIOVASCULAR DRUGS	beta blockers, ACE inhibitors	92,078	7.4
ANTIDEPRESSANTS	SSRIs, SNRIs, MAOIs	91,679	7.4
SEDATIVE/ANTI-PSYCHOTIC DRUGS	benzodiazepine, haloperidol	88,503	7.1
HOUSEHOLD CLEANING PRODUCTS	bleach, drain cleaner, air freshener, ammonia	54,062	6.1
ALCOHOLS	alcoholic beverages, cough syrup, mouthwash	54,062	4.4
ANTICONVULSANT DRUGS	gabapentin, phenobarbital	47,744	3.8
ANTIHISTAMINES	diphenhydramine, loratadine	45,426	3.7
HORMONES & HORMONE ANTAGONISTS	birth control pills, cancer medications	42,408	3.4
STIMULANTS & STREET DRUGS	ADHD medications, nicotine, cocaine, meth	38,536	3.1

<https://www.poison.org/poison-statistics-national>

How can accidental poison exposures be prevented?

- Keep all household products and pharmaceuticals in their original packaging, stored out of reach of children and/or in locked cabinets. Use child-resistant packaging whenever possible.
- Always read labels carefully and use medications as directed.
- Instruct everyone in the household or workplace how to use chemicals safely and to never mix cleaning products.
- Always use gas generators, grills, and other fuel-burning devices safely (see page 10), and install carbon monoxide (CO) detectors at home and at work.

What are the symptoms of poisoning?

- Symptoms can include confusion, slurred speech, headache, chest pain, stomach pain, GI issues, very slow or rapid heartbeat or breathing, very small or large pupils, incoordination, and blurred vision.

What should you do if you or someone else has a poison exposure or accidental overdose?

- If the person is conscious, call Poison Control at 800-222-1222 to help you determine your next steps. If the person exposed has a seizure, loses consciousness, or stops breathing, call 911 immediately.
- **If the person is pregnant or an infant, or if the poisoning/ overdose was intentional, call 911 immediately.**

POST-DISASTER POISONS

Florida has had more than its fair share of severe weather in recent years, and most residents are well rehearsed in preparing for the worst -- but in the aftermath of a storm, many people overlook these dangers.

CARBON MONOXIDE POISONING

When the power goes out, many people rely on gas-powered generators, propane and charcoal grills, kerosene lamps, and other fuel-burning devices that produce carbon monoxide (CO), an odorless, colorless, poisonous gas, which can build up quickly and become deadly.

Statistics:

- Non-fire related CO poisoning causes 14,000+ hospitalizations and 400+ deaths in the U.S. each year.
- Officials at the Florida Department of Health reported 41 cases of CO poisoning just in the first two weeks after Hurricane Ian in 2022 -- nearly a quarter of all poisonings in Florida that year. The aftermath of Hurricane Irma in 2017 brought 539 CO poisoning cases in Florida.

Preparation & Prevention:

- Learn how to use generators and other fuel-burning devices safely -- that is, outside. Place generators at least 20 feet from any door, window, or vent. Never use a grill inside an enclosed space.
- Install battery-powered CO detectors in your home and test them every six months. If the alarm sounds, go outside and call 911.
- Finally, know how to recognize the symptoms of CO poisoning, often described as "flu-like" -- headache, dizziness, weakness, upset stomach, vomiting, chest pain, and confusion.

FOODBORNE ILLNESS

Prolonged outages and floodwaters can allow bacteria to flourish, increasing the chance of food-borne illnesses, aka "food poisoning." Perishable foods, such as meats, seafood, and dairy, may be unsafe to eat or drink after just four hours in a refrigerator with no power. Food, water, cookware, dishes, and food prep surfaces contaminated by floodwater can breed and spread infectious diseases such as E. coli and Salmonella. Common symptoms of food poisoning include nausea, vomiting, diarrhea, and stomach cramps.

Statistics:

- More than 100,000 people are taken to hospitals and around 3,000 people die from foodborne illnesses each year in the U.S.
- The CDC estimates that foodborne illnesses affect one in six Americans every year.

Preparation & Prevention:

- Have ice packs and coolers on hand before a storm; freeze water in plastic containers to make ice. If the power goes out, keep fridge and freezer doors closed; food will remain safe to eat for up to four hours in a closed fridge, and up to 48 hours in a closed freezer.
- Food can look, smell, and taste normal but still make you sick. Throw out any food that may not be safe to eat, including any perishable foods that have been above 40° F for longer than two hours. Frozen food that has thawed but still contains ice crystals can be safely refrozen or cooked.
- Throw out any food containers with screw caps, snap lids, flip tops, and home-canned goods that have come in contact with floodwater. Cans that are otherwise not damaged can be disinfected by removing labels and washing in a bleach solution.
- Thoroughly clean and sanitize all non-porous surfaces that may have come in contact with floodwater, especially dishes, cookware, cutlery, and kitchen countertops. Throw away wooden cutting boards and spoons -- they cannot be properly sanitized.

DRUG & ALCOHOL POISONING

During emergency situations people often forget to use safe practices for storage and use of medications, sometimes allowing them into the wrong hands (usually children). People distracted by storm preparation, evacuation, and aftermath might accidentally take the wrong medication or an incorrect dose of a prescription. The stress, displacement, and even boredom associated with the aftermath of a storm can cause people to consume alcohol or other substances in unsafe amounts.

Statistics:

- About 60,000 children are taken to emergency rooms each year after finding and ingesting medicines.
- A study following Hurricane Ike in 2007 found that 26% of survivors increased their alcohol use, with more than a third of those being new drinkers.

Preparation & Prevention:

- Keep all medications, including your emergency supply and "go bags", out of sight and reach of children.
- Include contact information for your physicians, pharmacist, and Poison Control Center (800-222-1222) in your evacuation supplies.
- Properly dispose of unused, expired, or contaminated medicines, including any that have touched floodwater.

EXPOSURES TO PATHOGENS & TOXINS DURING CLEANUP

Destructive storms such as hurricanes and tornadoes can leave many environmental hazards in their wake. Storm surge carries microbes inland. Floodwaters sweep pathogens from farms, industrial sites, landfills, and reclamation areas, contaminating our buildings and water supply. Standing water, wet structures, and debris allow bacteria and mold to grow, as well as providing breeding grounds for mosquitoes and other insects that can spread illness. Decaying organic material can spawn airborne fungi that can cause illness if inhaled. Downed trees can harbor or hide poisonous plants (like poison ivy or sumac) or be poisonous themselves (like poisonwood or manchineel).

Many state workers volunteer to help with cleanup efforts after such storms, but they may not know the dangers or how to avoid them. Make sure anyone tasked with cleanup knows how to work safely to mitigate hazards.

Statistics:

- Researchers at Columbia University have reported significant increases in E.coli infections, cryptosporidiosis infections, and cases of Legionnaires' disease due to exposure to storm-related rainfall.
- Florida health authorities issued a notice after Hurricanes Helene & Milton warning residents to avoid wading in floodwaters due to a spike in Vibrio vulnificus, a bacteria that can break down skin and even lead to amputations. So far in 2024, Florida has reported 77 cases and 15 deaths from Vibrio infections, the most recorded in a decade.

Preparation & Prevention:

- If possible, avoid direct contact with floodwater, and dump out any standing water.
- If the water supply becomes contaminated, have a supply of drinking water on hand, and boil water before using it for cooking, bathing, or brushing your teeth, until local authorities say it is safe to consume.
- Mold and bacteria can appear in as little as 24 to 48 hours after floodwater recedes. Throw out anything that absorbs floodwater, such as fabrics, carpets, unsealed wood, and drywall. Hard surfaces should be cleaned and disinfected as soon as possible.
- Avoid burning plant debris that may include poisonous plants.
- Use proper PPE for any cleanup or remediation tasks:
 - When wading through floodwaters, wear waterproof clothing, gloves, and tall boots.
 - When clearing debris, avoid insect bites and contact with poisonous plants by wearing waterproof work gloves, work boots, long-sleeved shirts, and long pants tucked into socks; use an insect repellent containing DEET or picaridin.
 - When discarding contaminated materials, minimize fungal and bacterial contact by using respirators or N-95 masks, gloves, and eye protection.
 - When using cleaning products, wear rubber gloves and eye protection.
- Keep a first aid kit stocked with disinfectant and antibacterial cream to care for wounds before they become infected.
- Be on the lookout for symptoms of exposure -- skin rashes, respiratory issues, or flu-like symptoms.



OSHA'S TOP 10 SAFETY VIOLATIONS FOR 2024

Each year, the Occupational Safety & Health Administration provides a list of the most commonly cited workplace violations for that fiscal year (October 1 through September 30). This year's list resembles that of last year, with a few interesting shifts in rankings. Here are the takeaways:

- Fall Protection has held the top spot for a consecutive 14 years.
- Hazard Communication has been in the #2 spot for the past three years.
- OSHA's Ladders violation has climbed steadily up the chart over the past six years and remains at #3 for the second year.
- Respiratory Protection had fallen to #7 in 2023 but is back up at #4 this year.

The good news is that the number of violations dropped by 10% across the board last year, after an increase the previous year.

- 1. Fall Protection -- General Requirements** (6,307: down by 964, stayed at #1)
- 2. Hazard Communication** (2,888: down by 325, stayed at #2)
- 3. Ladders** (2,573: down by 405, stayed at #3)
- 4. Respiratory Protection** (2,470: down by 11, up from #7)
- 5. Lockout/Tagout** (2,443: down by 111, up from #6)
- 6. Powered Industrial Trucks** (2,248: down by 313, down from #5)
- 7. Fall Protection -- Training Requirements** (2,050: down by 62, up from #8)
- 8. Scaffolding** (1,873: down by 986, down from #4)
- 9. Personal Protective Equipment -- Eye & Face Protection** (1,814: down by 260, stayed at #9)
- 10. Machinery & Machine Guarding** (1,541: down by 103, stayed at #10)

MEETING OSHA'S SAFETY STANDARDS

COMMON MISTAKES & HOW NOT TO MAKE THEM

FALL PROTECTION -- GENERAL REQUIREMENTS

Failure to provide fall protection to prevent slips, trips, and falls

Use covers, railings, or toe boards over all holes, near elevated open-sided platforms and runways, and near machines and equipment.

Keep floors clean and dry.

Use additional means of fall protection when needed, such as safety harness and fall arrest systems, safety nets, stair railings, & handrails.

HAZARD COMMUNICATION

Failure to have a written program informing workers of the risks of tasks; failure to provide SDSs or identify chemical hazards

Ensure workers are aware of any potential hazards they may face at work and provide the necessary safety information and training to protect them, including safety signage, labeling, and SDSs.

Keep a detailed record of any hazardous materials that are used, stored, or disposed of on the worksite, including the type and quantity of material and any relevant safety precautions enacted.

LADDERS

Using the wrong type of ladder for a task; improper use; failure to secure ladders; lack of training; missing or inadequate fall protection; faulty or improper equipment

Ladders must be the right height and able to support the maximum intended load.

Ladders must be set up correctly, secured, and should not be used on slippery, unstable, or unlevel surfaces.

Rungs should be parallel, level, uniformly spaced, and have skid-resistant material to minimize slipping.

Users should maintain three points of contact with the ladder at all times.

RESPIRATORY PROTECTION

Failure to provide respiratory protection for employees exposed to airborne contaminants

Select and provide appropriate respiratory protection, such as masks and respirators (PPE).

Prevent atmospheric contamination with controls such as central and local ventilation or substitution for non-toxic materials, etc.

LOCKOUT/TAGOUT

Failure to control hazardous energy sources when working on machines

Implement training on Lockout/Tagout procedures.

Isolate and render inoperative any hazardous energy sources before workers operate or maintain equipment.

POWERED INDUSTRIAL TRUCKS

Lack of operator training; failure to perform regular inspections; improperly maintained trucks

Develop and implement operator training programs; regularly reassess and update training to meet the latest safety protocols.

Implement regular inspections and maintenance of trucks and address identified issues promptly.

Use clear communication and signage to indicate safe routes, restricted areas, load capacity, and other operational instructions.

FALL PROTECTION -- TRAINING REQUIREMENTS

Failure to provide training for each employee who might be exposed to fall hazards

Provide a training program to enable each employee to learn how to recognize slip, trip, and fall hazards and how to minimize these hazards.

Provide training to each employee who is required to use a personal fall arrest system (PFAS), including the proper procedures for installing, inspecting, operating, maintaining, and disassembling the PFAS.

SCAFFOLDING

Improperly built scaffolds (inadequate load capacity or plank width); unsafe use of scaffolds (exceeding load capacity, failure to use fall protection); insufficient training

Use platforms that are at least 18" wide with planks no more than 14" apart, with a load capacity of at least 4x the maximum intended load.

Keep scaffolds uncluttered and free from debris or materials that impose a tripping hazard.

Use proper fall protection such as guardrails, cross bracing, and PFASs when working at heights above 10 feet.

Provide training that covers assembly, proper use, and inspection procedures for all workers involved in scaffolding operations.

PPE -- EYE & FACE PROTECTION

Lack of workplace assessments for potential eye and face hazards; inadequate PPE; insufficient training, fit testing, or maintenance of PPE

Determine the nature and severity of potential eye and face hazards; select and provide appropriate PPE, such as safety glasses, goggles, and face shields .

Train employees on the proper use of eye and face protection and conduct fit testing and maintenance to ensure each workers has PPE that fits properly and comfortably, without vision obstruction or defects .

MACHINE GUARDING

Failure to adequately shield employees from parts of equipment that may cause injuries

Conduct risk assessments to identify potential hazards associated with each machine, such as nip points, rotating parts, flying chips, or sparks.

Choose guards that are durable, secure, suitable for the specific machine and operation, and capable of withstanding operational stresses.

Train workers on the purpose, proper use, and importance of machine guards.



“Knowing how workers are hurt can go a long way toward keeping them safe. The OSHA Top 10 list calls out areas that require increased vigilance to ensure everyone goes home safely each day.”

– Deborah A.P. Hersman, National Safety Council President



SPOTLIGHT ON FRAUD INVESTIGATIONS

CoventBridge's Special Investigations Unit (SIU) is a team of eight investigators, most with more than 15 years of experience investigating suspect insurance claims. The SIU works as a liason between the Florida Department of Financial Services' Division of Risk Management (DRM) and its Criminal Investigations Division (CID) on the investigation of suspicious workers' compensation, liability, and property insurance claims.

Look for more information about the process and progress of DRM's fraud investigations in future issues of the Safety & Loss Prevention OUTLOOK.

The SIU program helps to mitigate the state of Florida's financial exposure by assisting DRM's claims adjusters in recognizing potential fraudulent activity and determining whether further investigation is warranted. CoventBridge's SIU liason works onsite at DRM two days a week, collaborating with DRM employees in conducting file reviews on suspect insurance claims. The SIU investigators then conduct and monitor claims investigations, obtain and review surveillance videos, and work with DRM's attorneys on depositions.



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The safety training required per section 284.50, F.S. for all newly-appointed safety and alternate safety coordinators is now being provided through online training modules available at your convenience.

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